

IN THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claims 1-100 (Canceled).

101. (New) A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet after deciding the execution of handover to said second subnet; and

said first access router is arranged to provide information included in an RA message sent in said second subnet by said second access router or said default router together with said link local address to said mobile terminal.

102. (New) The communication system according to claim 101, wherein said mobile terminal is arranged to refer to said link local address when transmitting packet to outside of said second subnet after executing the handover from said first subnet to said second subnet.

103. (New) The communication system according to claim 101, wherein said mobile terminal is arranged to request said link local address to said first access router when transmitting a message P to request information relating to said second access router.

104. (New) The communication system according to claim 103, wherein said mobile terminal is arranged to add information to instruct a request of said link local address in said message P or to transmit information to request said link local address different from said message P to said first access router, said first access router acquires said link local address relating to a subnet specified by information in said message P, and specified by at least one of information to request said link local address and information in said message P received from said mobile terminal, and transmits a message Q or a notifying

message different from said message Q to said mobile terminal by incorporating said link local address in the message Q, which is a response message of said message P, or the notifying message different from said message Q.

105. (New). A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet after deciding the execution of handover to said second subnet; and

said first access router acquires said link local address relating to the subnet specified by information in a message P when the message P to request information relating to said second access router is received from said mobile terminal and transmits a message Q including said link local address to said mobile

terminal by incorporating said link local address in the message Q, which is a response message of said message P.

106. (New) A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet after deciding the execution of handover to said second subnet; and

said first access router acquires said link local address relating to the subnet specified by information in a message P when the message P to request information relating to said second access router is received from said mobile terminal, and transmits a notifying message including said link local address to said mobile terminal by incorporating said link local address

in the notifying message different from the message Q, which is a response message of said message P.

107. (New) A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet is arranged to request a link local address of said second access router or of a default router in said second subnet to said first access router when transmitting a message R to request to forward a packet addressed to said mobile terminal to said second access router under the condition being connected to said first subnet after deciding the execution of the handover to said second subnet; and

said first access router is arranged to provide said link local address to said mobile terminal.

108. (New) The communication system according to claim 107, wherein said mobile terminal is arranged to add information to instruct a request of said link local address in said message R or to transmit information to request said link local address different from said message R to said first access router, said first access router acquires said link local address relating to the subnet specified by at least one of information in said message R, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R, and is arranged to transmit a message S including said link local address to said mobile terminal by incorporating said link local address in the message S, which is a response message of said message R.

109. (New) The communication system according to claim 108, wherein said mobile terminal is arranged to transmit information to request said link local address different from said message R to said first access router; and

said first access router is arranged to request said link local address to said second access router when transmitting a

message T to request the initiation of handover processing relating to said mobile terminal.

110. (New) The communication system according to claim 108, wherein said mobile terminal is arranged to transmit information to request said link local address different from said message R to said first access router; and

said second access router is arranged to acquire said link local address relating to said second subnet, to which said second access router belongs, when said message T is received from said first access router, and to transmit a message U or a notifying message different from said message U to said first access router by incorporating said link local address in the message U, which is a response message of said message T or in the notifying message different from said message U.

111. (New) The communication system according to claim 107, wherein said mobile terminal is arranged to add information to instruct a request of said link local address in said message R or to transmit information to request said link local address different from said message R to said first access router, said first access router is arranged to acquire said link local

address relating to the subnet specified by at least one of information to request said link local address, information in said message R received from said mobile terminal, information in said message R received from said mobile terminal, a message P to request information relating to said second access, router, and information in said message P received from said mobile terminal already before the receiving of said message R, and transmits said notifying message including said link local address by incorporating said link local address in the notifying message different from the message S, which is a response message of said message R.

112. (New) The communication system according to claim 111, wherein said mobile terminal is arranged to add information to request said link local address in said message R, and said first access router is arranged to request said link local address to said second access router when transmitting the message T to request the initiation of handover processing relating to said mobile terminal.

113. (New) The communication system according to claim 112, wherein said first access router is arranged to add information

to indicate a request of said link local address in said message T or to transmit information to request said link local address different from said message T to said second access router, and said second access router is arranged to acquire said link local address relating to said second subnet, to which said second access router belongs, and to transmit a message U or a notifying message different from said message U to said first access router by incorporating said link local address in the message U, which is a response message of said message T, or in the notifying message different from said message U.

114. (New) The communication system according to claim 111, wherein said mobile terminal is arranged to add information to indicate a request of said link local address in said message R; and

said second access router is arranged to acquire said link local address relating to said second subnet, to which said second access router belongs, when said message T is received from said first access router, and to transmit a message U or a notifying message different from said message U to said first access router by incorporating said link local address in the

message U, which is a response message of said message T, or in the notifying message different from said message U.

115. (New) A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet after deciding the execution of handover to said second subnet; and

when the message R to request information relating to said second access router is received from said mobile terminal, said first access router acquires said link local address relating to the subnet specified by at least one of information in said message R, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said

message R, and to transmit a message S or a notifying message different from said message S to said mobile terminal by incorporating said link local address in the message S, which is a response message of said message R, or in a notifying message different from said message S.

116. (New) A communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

under the condition that said mobile terminal is connected to said first subnet, said first access router is arranged to transmit a message W to instruct the execution of handover to said second subnet, which includes said link local address of said second access router or of a default router in said second subnet, to said mobile terminal.

117. (New) The communication system according to claim 116, wherein said first access router is arranged to provide

information included in an RA message sent in said second subnet by said second access router or said default router together with said link local address to said mobile terminal.

118. -(New) The communication system according to claim 116, wherein said mobile terminal is arranged to refer to said link local address when transmitting a packet to outside of said second subnet after executing the handover from said first subnet to said second subnet.

119. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, a mobile terminal arranged to be connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet when the handover is executed from said first subnet to said second subnet;

means for receiving said link local address from said first access router; and

means for referring to said link local address when a packet is transmitted to outside of the said second subnet after executing the handover from said first subnet to said second subnet.

120. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, a mobile terminal arranged to be connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address of said second access router or of a default router in said second subnet to said first access router when transmitting the message P to request information relating to said second access router under the condition being connected to said first subnet in case the handover is executed from said first subnet to said second subnet; and

means for receiving said link local address from said first access router.

121. (New) The mobile terminal according to claim 120, wherein there are provided:

means for adding information to instruct a request of said link local address in said message P or means for generating information to request said link local address different from said message P and for transmitting it to said first access router;

means for receiving a message Q including said link local address and being a response message of said message P, or a notifying message different from said message Q and including said link local address from said first access router; and

means for extracting said link local address from said message Q or from said notifying message different from said message Q.

122. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second

access router being connected via IP network, a mobile terminal arranged to be connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet when executing the handover from said first subnet to said second subnet;

means for receiving a message Q including said link local address, which is a response message of said message P, or a notifying message different from said message Q and including said link local address from said first access router as a response after transmitting the message P to request information relating to said second access router; and

means for extracting said link local address from said message Q or from said notifying message.

123. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, a mobile terminal

arranged to be connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address of said second access router or of a default router in said second subnet to said first access router when transmitting a message R to request to forward a packet addressed to said mobile terminal to said second access router under the condition connected to said first subnet when executing the handover from said first subnet to said second subnet; and

means for receiving said link local address from said first access router.

124. (New) The mobile terminal according to claim 123, wherein there are provided:

means for adding information to instruct a request of said link local address in said message R, or means for generating information to request said link local address different from said message R and for transmitting it to said first access router;

means for receiving a message S including said link local address and being a response message of said message R or a

notifying message different from said message S and including said link local address from said first access router; and

means for extracting said link local address from said message S or from said notifying message different from said message S.

125. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, a mobile terminal arranged to be connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address of said second access router or of a default router in said second subnet to said first access router under the condition being connected to said first subnet when executing the handover from said first subnet to said second subnet;

means for receiving a message S including said link local address and being a response message of said message R or a notifying message including said link local address and a notifying message different from said message S from said first

access router as a response after transmitting the message R to request to forward a packet addressed to said mobile terminal to said second access router; and

means for extracting said link local address from said message S or from said notifying message different from said message S.

126. (New) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, a mobile terminal arranged to be connected to said first subnet or said second subnet via radio communication, wherein there is provided means for receiving a message W to instruct the execution of handover to said second subnet and including said link local address of said second access router or of a default router in said second subnet from said first access router.

127. (New) The mobile terminal according to claim 126, wherein there is provided means for receiving information included in an RA message sent in said second subnet by said

second access router or said default router from said first access router.

128. (New) The mobile terminal according to claim 126, wherein there is provided means for referring to said link local address when transmitting a packet to outside of said second subnet after executing the handover from said first subnet to said second subnet.

129. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a request of a link local address of said second access router or a default router in said second subnet from said mobile terminal connected to said first subnet and deciding that handover is executed to said second subnet;

means for acquiring said link local address; and

means for providing information included in an RA message sent in said second subnet by said second access router or by said default router together with said link local address to said mobile terminal.

130. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a request of a link local address of said second access router or of a default router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet when receiving a message P to request information relating to said second access router from said mobile terminal;

means for acquiring said link local address; and

means for providing said link local address to said mobile terminal.

131. (New) The access router according to claim 130, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in said message P when information to instruct a request of said link local address added in said message P is received as a request of said link local address from said mobile terminal, and by at least one of information to request said link local address and information in said message P received from said mobile terminal when information to request said link local address different from said message P is received; and

means for generating a message Q or a notifying message different from said message Q by incorporating said link local address in the message Q, which is a response message of said message P, or in a notifying message different from said message Q, and for transmitting said message Q or said notifying message different from said message Q to said mobile terminal.

132. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second

access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a request of a link local address of said second access router or of a default router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet;

means for acquiring said link local address relating to a subnet specified by information in a message P when the message P to request information relating to said second access router is received from said mobile terminal; and

means for generating a message Q or a notifying message different from said message Q by incorporating said link local address in said message Q or in the notifying message different from said message Q, which is a response message of said message P, and for transmitting said message Q or said notifying message different from said message Q to said mobile terminal.

133. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second

access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a link local address of said second access router or of a default router in said second subnet when a message R to request to forward a packet addressed to said mobile terminal from said mobile terminal to said second access router is received from said mobile terminal, which is connected to said first subnet and deciding the execution of handover to said second subnet;

means for acquiring said link local address; and

means for providing said link local address to said mobile terminal.

134. (New) The access router according to claim 133, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in said message P, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R when information to request said link local address added in

said message R is received as a request of said link local address from said mobile terminal, or a subnet specified by at least one of information in said message R received from said mobile terminal, information in said message R received from said mobile terminal, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R when information to request said link local address different from said message R is received; and

means for generating a message S including said link local address by incorporating said link local address in the message S, which is a response message of said message R, and for transmitting said message S to said mobile terminal.

135. (New) The access router according to claim 134, wherein there is provided means for requesting said link local address to said second access router when transmitting a message T to request the initiation of the handover processing relating to said mobile terminal in case information to request said link local address added in said message R is received as a request of said link local address from said mobile terminal.

136. (New) The access router according to claim 135,
wherein there are provided:

means for adding information to request said link local
address in said message T or means for generating information to
request said link local address different from said message T,
and for transmitting it to said second access router;

means for receiving a message U, being a response message of
said message T and including said link local address or said
notifying message including said link local address; and

means for extracting said link local address from said
message U or said notifying message.

137. (New) The access router according to claim 134,
wherein there are provided:

means for receiving a message U including said link local
address and being a response message of said message T or a
notifying message including said link local address from said
second access router as a response after transmitting said
message T when information to request said link local address
added in the message R is received as a request of said link
local address from said mobile terminal; and

means for extracting said link local address from said message U or from said notifying message.

138. (New) The access router according to claim 133, wherein there are provided:

means for acquiring said link local address relating to a subnet specified by at least one of information in said message R, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R in case information to request said link local address added in said message R is received as a request of said link local address from said mobile terminal, or a subnet specified by at least one of information to request said link local address, information in said message R received from said mobile terminal, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already received before the receiving of said message R in case information to request said link local address different from said message R is received; and

means for generating said notifying message including said link local address by incorporating said link local address in a

notifying message different from a message S, which is a response message of said message R, and for transmitting said notifying message to said mobile terminal.

139. (New) The access router according to claim 138, wherein there is provided means for requesting said link local address to said second access router when transmitting a message T to request the initiation of the handover processing relating to said mobile terminal in case information to request said link local address added in said message R is received as a request of said link local address from said mobile terminal.

140. (New) The access router according to claim 138, wherein there are provided:

means for receiving a message U being a response message of said message T and including said link local address from said second access router as a response after transmitting said message T in case information to request said link local address added in said message R is received as a request of said link local address from said mobile terminal; and

means for extracting said link local address from said message U or from said notifying message.

141. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a request of a link local address of said second access router or of a default router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet;

means for acquiring said link local address relating to a subnet specified by at least one of information in said message R, a message P to request information relating to said second access router, and information in said message P received from said mobile terminal already before the receiving of said message R; and

means for generating a message S or a notifying message different from the message S by incorporating said link local address in the message S, which is a response message of said message R, or in the notifying message different from the message

S, and for transmitting said message S or said notifying message different from the message S to said mobile terminal.

142. (New) An access router in a communication system, comprising a first access router belonging to a first subnet and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, said access router being connected to said mobile terminal via radio communication, wherein there are provided:

means for receiving a request of a link local address of said second access router or of a default router in said second subnet from said mobile terminal connected to said first subnet and deciding the execution of handover to said second subnet;

means for acquiring said link local address; and

means for transmitting a message including said link local address and for instructing the execution of handover to said second subnet to said mobile terminal.

143. (New) The access router according to claim 142, wherein there is provided means for giving information included in an RA message sent in said second subnet by said second access

router or said default router together with said link local address to said mobile terminal.

144. (New) An access router, comprising a second access router belonging to a second subnet different from a first subnet, to which a first access router belongs, said second access router being connected with said first access router via IP network, and being connected to a mobile terminal via radio communication, wherein there is provided:

means for receiving a request of said link local address of said second access router or of a default router in said second subnet from said first access router when a message T to request the initiation of the handover processing relating to said mobile terminal from said first access router is received.

145. (New) The access router according to claim 144, wherein it is so arranged that information included in an RA message sent in said second subnet by said second access router or said default router is provided together with said link local address to said first access router.

146. (New) The access router according to claim 144, wherein there are provided:

means for receiving information to instruct a request of said link local address added in said message T as a request of said link local address from said first access router or for receiving information to request said link local address different from said message T;

means for acquiring said link local address in case said message T added with information to instruct a request of said link local address is received from said first access router or in case information to request said link local address is received from said first access router; and

means for generating said message U or said notifying message different from said message U including said link local address by incorporating said link local address in the message U, which is a response message of said message T, or a notifying message different from said message U, and for transmitting said message U or said notifying message different from said message U to said first access router.

147. (New) The access router according to claim 144, wherein there are provided:

means for acquiring said link local address in case said message T is received from said first access router; and

means for generating s message U or a notifying message different from said message U by incorporating said link local address in the message U, which is a response message of said message T, or in the notifying message different from said message U, and for transmitting said message U or said notifying message different from the message U to said first access router.